

GREAT LAKES RESTORATION



KEWEENAW BAY INDIAN COMMUNITY

The Keweenaw Bay Indian Community (KBIC) is the successor in interest of the L'Anse and Ontonagon Bands of Lake Superior Chippewa Indians and signatory to two treaties of peace with the United States of America: the 1842 Treaty with the Chippewa, and the 1854 Treaty with the Chippewa. The Treaty of 1854 established the L'Anse and Ontonagon Indian Reservations located in Baraga and Ontonagon Counties. KBIC also retains treaty reserved hunting, gathering and fishing rights in ceded territories throughout the western Upper Peninsula and northern Wisconsin. The 70,000 acre L'Anse Reservation is located in lower Keweenaw Bay along the shores of Lake Superior and is the Community's principle land base. As a sovereign nation with Reservation lands on the shore of Lake Superior, public drinking water supplies drawing from Lake Superior, and strong historical and cultural ties to Lake Superior, KBIC has a strong interest in participating in basin-wide planning and cooperative management processes and projects that address natural resource threats, and focus on restoration and protection of Lake Superior.

Our visions, goals, and objectives communicated through our Integrated Resources Management Plan and our Comprehensive Strategic Plan are consistent with EPA's objective to "Improve the Health of the Great Lakes" as well as goals, objectives and activities outlined in the Lake Superior LaMP. Our commitment to Lake Superior ecosystem protection and restoration is demonstrated through our initiation of numerous projects and activities as described in this document.

The Great Lakes Restoration Initiative has provided us an opportunity to address our critical needs which will help us to meet the vision of the Community for resource management of enhancing and sustaining our natural resources for the seventh generation.

Great Lakes Restoration at KBIC

- ◆ Received directly by KBIC: **\$1,655,960**
- ◆ Received through partners: **\$546,508**
- ◆ Total Amount: **\$2,202,468**
- ◆ Number of Jobs: **6**
- ◆ Number of Programs Initiated: **9**
- ◆ Contractor Funding: **\$761,542**

GLRI Priorities Addressed by KBIC GLRI Funded Programs

- ◆ Cleaning up toxics
- ◆ Combating invasive species
- ◆ Restoring habitats
- ◆ Working with partners on outreach



Lake Superior Lakewide Management Plan (LaMP) Goals Addressed by KBIC GLRI Funded Programs

- ◆ Promoting diverse, healthy and self-sustaining native plant and animal communities through protection and restoration of degraded habitats
- ◆ Native plant species propagation
- ◆ Monitoring and control of harmful invasive species
- ◆ Develop information and educational materials for local communities
- ◆ Develop partnerships with other natural resource management agencies

Sand Point Wildlife Habitat Restoration

Funding Amount: \$360,960

Project Duration: 2010-2012

Sand Point is a brownfield site which has been impacted by historic copper ore processing waste. The Sand Point restoration project, which began in 2006 with placement of a soil cover over stamp sands, is moving ahead with GLRI funds received in 2010. The new work includes additional soil cover, gardens, soil mounds, and native plantings. To date, soil mounds and native seed plots



Sand Point before cap and re-vegetation in 2006



Sand point after 2006 cap and re-vegetation



One-acre native plant garden and pond at Sand Point restoration site, 2011

have been installed and a one acre demonstration garden has been planted with approximately 48 species of native herbaceous plants and seven different species of trees and shrubs. New plantings have been irrigated. A fall planting with cover crop was completed at the end of September. The field season is over for 2011, but additional work will begin in spring 2012. Additional work will include placement of boulders, additional native plantings and associated irrigation. Improvements will provide habitat for a variety of wildlife and add some variety to the scenery.

Fish Passage/Culvert Project through USDA NRCS



One of the 12 culverts to be replaced in Baraga County.

In 2011, KBIC partnered with USDA-NRCS and the Baraga County Road Commission to establish the western portion of the Dead-Kelsey watershed as a priority area for fish passage restoration. This partnership initially developed through completion of a Rapid Watershed Assessment project by the three partners which identified numerous road crossing locations with fish passage obstructions caused by road culverts that were perched, blocked, crushed, or simply undersized. With GLRI support the partnership will improve the health of the stream system on watersheds in and around the Reservation by reconstructing 12 road stream crossings and installing culverts or bridges that allow for passage of aquatic organisms upstream and downstream. Over \$400,000 of GLRI funding, along with Wildlife Habitat Incentives Program (WHIP) funding has been committed to the projects, with a total of \$788,936 available. Reservation streams are home to brook trout and many other cold water species and it is important to restore connectivity of the water systems on the Reservation to restore overall health of aquatic communities and watersheds. Work is set to begin in spring 2012 on the Falls River in Baraga County.

Sustainable Hazardous Waste Collection Program

Funding Amount: \$295,000

Project Duration: 2010-2013

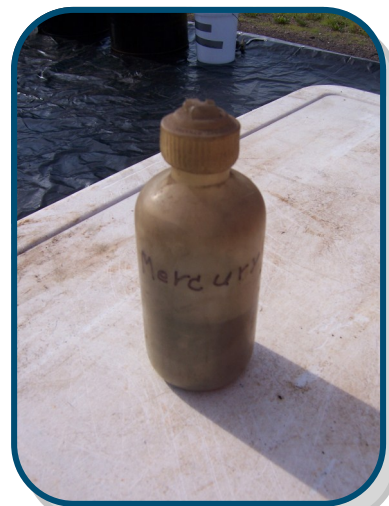
KBIC hosted two free household hazardous and electronic waste collection events—one in June and the other in October. The collection events were open to tribal members and all non-tribal residents of Baraga County. More than 350 used electronic devices such as TVs, computers, monitors, and microwaves were collected as well as over 5,000 pounds of household hazardous waste during the June collection. Wastes collected included used oil, old gasoline, pesticides, mercury, oil filters, car batteries, and other hazardous materials. Both collection events were considered a big successes by all involved considering that Baraga County only has about 8,860 residents. One of the most exciting items collected was a jar containing liquid mercury. A total of 29,636 pounds of waste was collected during the two events, including 19 pounds of mercury!

During the month of November, KBIC, in collaboration with Northwest Regional Planning Commission (NWRPC), organized a hazardous and electronic waste “milk run” collection event. The event collected hazardous and electronic waste from municipalities, businesses and schools in Baraga County free of charge for those who wanted to participate. Items accepted included computer monitors, CPU, printers, faxes, copy machines, peripherals, TV’s, floor copiers, batteries, poison solids, pesticides (solid or liquid), ballasts, and other items considered hazardous, especially those items containing mercury. A total of 31,169 pounds of waste were collected including 261 computer monitors and over 11,000 pounds of paint and related materials. Similar collection events are planned for 2012 and 2013.

KBIC also organized a tire collection event in November for all Baraga County residents. Over 300 used tires were collected during the event. Baraga County residents were provided free disposal for up to four tires with additional tires costing \$2 per tire. A total of \$140 was collected and will be used to pay for part of the tire disposal costs. KBIC plans to host another tire collection in 2012.



Electronic waste collected in June



Mercury collected during June event



November tire collection

Tribal Capacity Program

Funding Amount: \$1,000,000

Project Duration: 2010-2015



Lake Superior Program Coordinator

The Lake Superior Program Coordinator was hired to fill several gaps in capacity and is providing active and regular participation in the Binational Program and the LaMP process, additional outreach and education for the community and for tribal youth, helping develop a plan to address issues of Climate Change on the Reservation, and link KBIC activities in natural resource management to related activities throughout the basin. Some of the activities completed by the new Lake Superior Program Coordinator position include:

- ◆ Lake Superior Day Beach Clean-up
- ◆ Development of KBIC Natural Resources Department Quarterly Newsletter *Babaamaajimowin Akiing*
- ◆ Participation in Binational Program activities through the Superior Work Group and subcommittees
- ◆ Developing press releases and newsletter articles to keep the community informed of KBIC NRD activities and events
- ◆ Creation of informational brochures for invasive plant species on the reservation
- ◆ Attending local, regional, and international conferences, meetings and trainings



Summer youth crew members picking up trash along the beach for Lake Superior Day. Photo by Gene Bertram

Mining Technical Assistant

Since 2004 mineral exploration activities have been increasing within our ceded territories and on our L'Anse Reservation. Mining and related activities have the potential to significantly impact our treaty rights, our treaty reserved resources, area ecosystems, and the health and welfare of our community and future generations.



Exploratory drilling cores left at the Kennecott BIC Exploration Site, Baraga County, MI

Before GLRI program assistance was available, KBIC lacked adequate capacity to comprehensively track mining exploration and potential mining activity within our ceded territory and within our Reservation boundaries, compile technical and scientific data, outreach to the community, and assist KBIC Government in decision making processes related to mining. In June 2011 a Mining Technical Assistant was hired to help fill these gaps. Some of the activities of the Mining Technical Assistant include:

- ◆ Participation in mining related working groups and conference calls
- ◆ Assisting KBIC in review of mining permit applications (most recently the Orvana Copperwood Project in Gogebic Co., MI)
- ◆ Collecting and compiling information related to mining on the Reservation and within the ceded territory (BIC site and Kennecott Eagle Project)
- ◆ Organizing outreach/education opportunities including a monthly mining film series
- ◆ Attending local, regional, and international conferences, meetings and trainings

Invasive Plant Species Control & Native Plant Species Restoration

Funding Amount (GLRI through BIA): \$145,926

Anishinaabe people have traditionally harvested plants for food, ceremony, medicines, dyes, tools, construction, and basketry. KBIC's Integrated Resource Management Plan (IRMP) sets forth goals of protecting and expanding stands of culturally significant native plants (i.e. wild rice) and identifying and controlling invasive species on the Reservation that threaten the existence of our native plants. GLRI assistance and assistance from BIA programs provided sufficient support for KBIC to establish a Plant Technician position and provide training to help us meet the goals established in the IRMP. In 2012 three additional Technicians will be hired using assistance from BIA-GLRI program funds. Objectives of the invasive and native plant program at KBIC include:



Chemical control of Japanese barberry



Manual control of spotted knapweed

1) creating an inventory of plant species on reservation lands (native and non-native), 2) promotion of native plant use, 3) management of culturally significant plants, 4) control of invasive plant species, and 5) creation of wildlife habitat through native species restoration (see section on Sand Point Wildlife Habitat Restoration, pg 2).

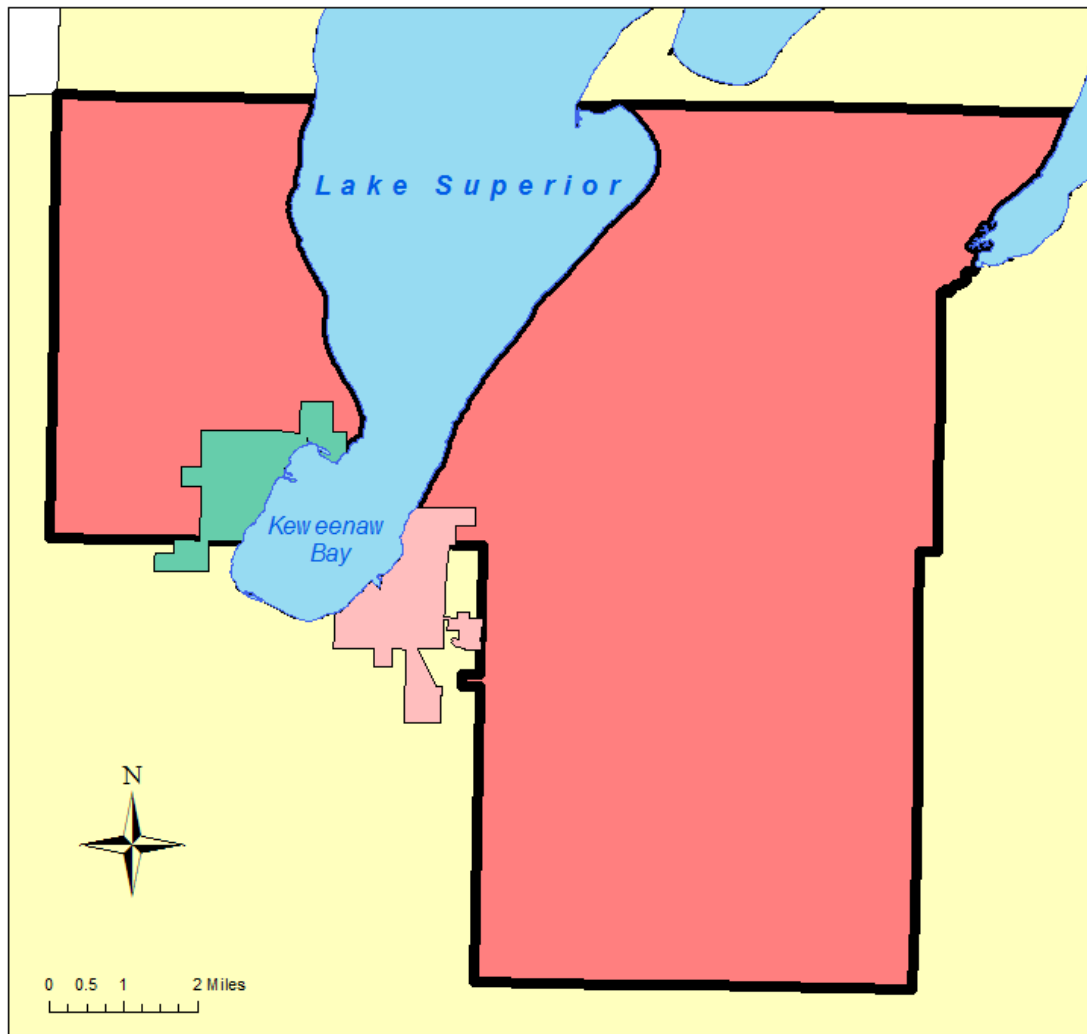
To date, control efforts have focused on four invasive species on Reservation lands: purple loosestrife, Japanese barberry, spotted knapweed, and Eurasian watermilfoil. KBIC is also working in collaboration with a number of groups and agencies on invasive control efforts and native seed collection and propagation, including Great Lakes Indian Fish and Wildlife Commission, U.S. Forest Service, Midwest Invasive Plant Network, Baraga County Conservation District, and others.

Native plant propagation for various restoration projects started in KBIC's solar-powered geodesic dome green house (see picture in bottom right). The community assisted the NRD in compiling a list of native and culturally significant plants to be grown in the green house and planted at Sand Point. Thirty species were grown in winter/spring 2011 including sage, sweetgrass, tobacco, black eyed susan, big blue steam, little blue stem, bee-balm, and false sunflower. Twelve species are planned for propagation in winter/spring of 2012. Wild rice seed has also been collected and/or purchased and planted in several places throughout the Reservation in hopes of restoring wild rice beds for tribal member harvest.




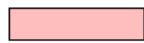


KBIC green house where native plants are grown for restoration projects on the L'Anse Reservation

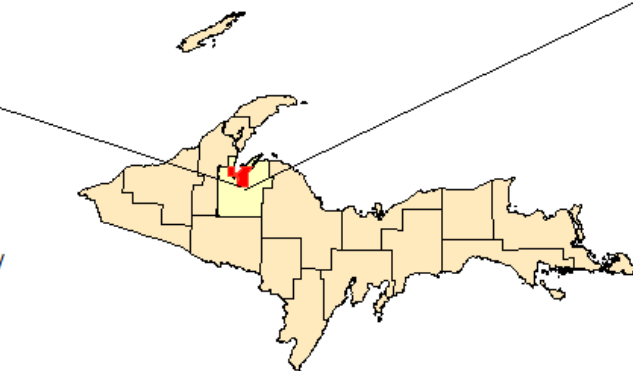
KBIC L'Anse Reservation



Legend

Villages

-  Baraga
-  L'Anse
-  KBIC Reservation Boundary
-  Baraga County



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